GENERAL INDEX TO THE AMERICAN BEE JOURNAL FOR 1905

SUBJECTS

Absconding swarms....501, 504, 619
Acacias....406
Acid for wax-rendering....263
Adulterated beeswax....49, 568, 584
Adulterated honey....349, 436,601, 616, 633, 694....715
Adulteration of honey in Illinois....436
Advertising honey....104, 163, 227, 392, 641, 648, 661, 743....845
Afterswarms....212
Age of bees....504
Agricultural work at Washington....541
Airing cellared bees....53
Alfalfa....243, 461, 543, 566, 749, 881
Alfalfa and sweet clover....742
Alfalfa honey....345, 847
Alley traps....213
Alsike clover....212, 331
Alum-weed honey....506
Amount of comb surface to be capped for distant market....203, 392
Amount of honey to make a pound of wax....882
Ants and bees....821
Ants—destroyer for black....247
Ants—getting rid of....897
Ants in hives....441, 523, 675
Aphides and honey-dew....460
Apiarian experiments needed....215
Apiarian outfit—most desirable....650
Apiarian representation in Australia....277
Apiarian resources—our country's undeveloped....541
Apiary record-book....651
Apicultural station in California....764
Apiculture at the Department of Agriculture, 41, 57, 183....242
Apis dorsata....517
Apple honey....204
Are bees wild or domestic?....184
Asters and snake-root....700
Auger-hole above usual entrance....491
Austrian sister skirts bees—an....391

Baby nuclei....19, 63, 346, 372, 441
Baby nuclei and queen-breeders....104
Baiting fish with honey....199
Bait-section honey....780, 827
Bait-sections—color of....862
Bait-sections or sections with full-sheet foundation—which finished first?....52
Balled queens....381, 548, 666
Banner honey county of New York....536
Bar-le-duc preserves....440
Basswood....651
Bee and honey plants for North Texas—best....519
Bee-birds....571
Bee-diseases—guarding against infection of....296
Bee-diseases—treatment and remedies....149
Bee-dress, veil, and gloves....472
Bee-escape board....780
Bee-farm in heart of business district....682
Bee-hat....425, 437
Bee-hives made of cedar and redwood....328
Bee-hive?—what is the best....21, 27, 54, 56, 143....168
Bee-house bees exercising in winter....89
Bee-insurance....725
Bee-keepers' licenses....726
Bee-keeper's lullaby....641
Bee-keeping....340, 439, 603
Bee-keeping and other things at Clovernook....885
Bee-keeping as an occupation....423, 904
Bee-keeping as a specialty....728
Bee-keeping for women....440, 634, 650, 739, 761....863
Bee-keeping from a woman's standpoint....439
Bee-keeping in—
Arkansas....122
Australia....746
Bosnia....344
California....422
Cuba....26
Georgia....363
Idaho....791
Russia....120
Texas....25
The South....887
The Southwest....83, 85, 117, 165
Uintah County, Utah....459
Washington....763
Bee-keeping on a large scale....727
Bee-keeping—pleasures of....58
Bee-keeping recognized....355
Bee-life—average length of....215
Bee-moth—remedy for....667
Bee-paralysis....69, 157, 171, 200, 299, 473, 598, 664, 699, 763....862
Bee-pasturage....587, 682
Bees (poem)....264
Bees and alsike clover....884
Bees and dark vs. light colors....728
Bees and fruit....233, 328, 408, 794
Bees and hens in the same yard....281
Bees and honey at Illinois Fair....420
Bees and pollination....880
Bees and tobacco odor....846
Bees as a nature study....11, 506
Bees as property and assessable....712
Bees, birds and fruit in California....102
Bees crowding to the super center....294
Bees deserting the hive....457
Bees do not puncture fruit....311
Bees dying....381, 425, 444, 885
Bees flying at low temperature....844
Bees freezing....243
Bees gnawing foundation in sections....233, 408
Bees hiving themselves....265
Bees immune from disease....312
Bees in a nail-keg....377
Bees in the attic....296
Bee-slanders—treatment of....857
Bee-smoker—cleaning a....597
Bees moving eggs....602
Bees noisy in the cellar....144
Bees on a platform....709
Bees out-of-doors....39
Bees refusing to leave a super for winter....827
Bees roaring or fanning in the cellar....618
Bee-sting remedies....19, 46, 136, 312, 408, 543
Bee-stings....76, 119, 615
Bee-stings—removing....55
Bees storing watermelon juice....210
Bees under snow....213
Bee-supplies are high—why....647
Bee-supplies—home-made....358
Bee-supply prices and the honey-market....823
Beeswax....292, 324, 328, 344, 587, 714, 757, 827....901
Bees wintered in a shed....167
Bees-veils....550, 620, 794
Beginners in bee-keeping....345, 443, 467, 551, 603....861
Beginners—warning to....403
Be prepared for next season....884
Best bee-hive....359, 715, 881
Best kind of bees....441, 715
Best workers....281
Bigelow educational bee-hive—the....373
Big purchase of honey....597
Biographical—
Brodbeck, George W....292, 308
Hetherington, Capt. J. E....137, 312
Holekamp, Robert A....421
Whitney, William M....615
Bi-sulphide of carbon....426, 904
Black bees....265, 677, 775, 795, 860
Black bees vs. Italians....845, 906
Black brood....45, 65, 148, 361, 714
Black brood vs. foul brood....66
Black foul brood....65, 200
Blessed are ye that fall (poem)....885
Boiling sugar?—what about....863
Bottom-boards....168, 279, 361, 392, 867, 904
Bottom-starters in sections..61, 485, 487, 618, 711
Brace-combs....8
Breeding queens....297, 313
Briar-berry....684
Brick honey....545, 865
Brood-chamber—contents of the....197
Brood dying in the spring....184
Brood-frames....43
Brood-frames and brood-spacing....540
Brood-frames—cover for....297, 345
Brood-frames full of wax and pollen....619
Brood-nest—size of....635
Brood-rearing....76, 146
Building comb....542
Bulk comb honey market....24
Bulk comb vs. section honey....520
Bumble-bees and honey-bees....264
Burr-combs....8
Bush clover....413, 733
Butter and honey as a bread-dip....104
Buying bees....746
Buying queens and foul brood....440

California as a home and for bee-keeping....37
Candied honey in paper packages....23
California as a honey state....214
Canadian bee-keepers in Jamaica....839
Canadian bee-wintering experiments....340
Canadians and Americans....425
Canadian sister's success....730
Candied sections....213
Candy for winter stores....827, 886
Candying or crystallizing of sugar and honey....131
Candy-makers and adulteration stories....120
Canning new extracted honey....279
Cans for extracted honey....231
Capturing swarms of bees....424
Care of honey....119
Carloads of honey....725, 779, 822
Carniolan bees....619
Carniolans and Cyprians....700
Carniolans, Italians, and blacks....316
Catching the drones....505
Catnip honey....264
Caucasian bees....60, 468, 877
Caucasion queens crossed with Cyprians....265
Cedar-wood moth-proof?—is....568
Cellar-feeding of syrup-filled combs....232
Cellar-wintering of bees....73, 121, 135, 207, 211, 263, 862....880
Cells—size of....565
Certificates for inspectors of apiaries....325
Chaff-hives....795
Champion for "our sister bee-keepers"....88
Changing from 9 to 8 frames....699
Changing nectar into honey....216
Chemists and honey definitions....521
Chicago-Northwestern convention....773
Chilled bees—treatment of....228
Chilled brood....148, 451
"Cider" honey from hive in which bees died—feeding....297
City office-roof apiary....682
Cleaning sections....43, 279
Cleansing beeswax....116
Cleansing brood frames....121
Cleome....880
Clipping queens....80, 249, 408, 424, 522
Cloistering hive and the cloistering method....405
Cloistering hive in winter....554
Closed end-bars....251
Closed-end frames....279
Clothing for bee-work....361
Colony in a box....651
Colony with an imported queen....145
Colony with a poor queen....409
Colorado apiarian exhibit at the St. Louis World's Fair....113
Color of beeswax....714
Columbus-comb of doubtful utility....51
Comb foundation....243, 324, 356, 408, 541, 634, 732....843
Comb honey....340, 470, 533, 537
Comb honey and the League....485
Comb honey and separators....133
Comb honey by freight....693
Comb honey in confectionery....360, 506
Comb honey lie....55, 275, 291, 340, 376
Comb honey management....247, 731
Comb honey production—a system of....828
Comb over top-bars....473
Combs and sections in same super....517
Comb vs. extracted honey....63, 345
Comparative cost of honey and light-weight sections causes of small demand....229
Convention Reports—
Chicago-Northwestern....488, 504, 519, 541, 584, 601, 616, 633, 648, 664, 680, 696, 712, 728, 745, 751, 777, 791, 825, 847, 865
Illinois State....326, 342
Michigan....202, 278
Middlesex....840
Minnesota....423, 439, 455, 471, 821
Missouri....760
Nebraska....103
North Texas....519, 568
Ontario....118, 146, 205
Texas....776, 792, 825, 846, 864, 881
Vermont....210
Wisconsin....230, 246
Worcester Co., Mass....295, 901
Convention reports—our....727
Convention time—how best to use....822
Co-operation among bee-keepers....326
Corn and sumac honey....361
Corn honey....409
Correspondence school in bee-keeping....24
Costume for lady bee-keepers....903
Cotton "controllable" hive....359, 413
Cough cure—Indian....312
Cover for sections....426
Crossing bees....360
Crosswise and closed-end frames....183
Croup cure—honey and salt....344
Cuban honey—a tariff on....324, 408
Culver's physic—a honey-plant....588
Curiosities and myths of bee-literature....216
Currants and honey....440
Cut-loaf sugar for bee-feeding....440, 571
Cutting foundation....212
Cyprian queen—an imported....613
Cyprians and queen-rearers....650

Daily colony record....630
Danzenbaker hives....211, 542
Dark honey below and white above....714
Dark honey for spring feeding....762
Dark honey or sugar syrup in the brood-chamber going into sections—possibility of....884
Daughters of best queens and others....392
Dead bees....184, 235, 361
Dead brood outside of hive....651
December work in and about the apiary....823
Decoy hives....376, 378, 412
Deep frames for extracting....104
Deep hive-bottom....169
Definition of honey....198, 419, 437, 521, 757, 866
De Luxe comb honey....75
Department of Agriculture—important work for the....541, 631
Depth of Langstroth hive....281
Depth of supers on Langstroth hive....39
Diarrhea—colonies affected with....281
Difference in honey results of colonies....859
Disagreeable peculiarities of best bees....837
Diseased bees....377
Diseases of bee-larvae....147
Diseases of bees....205, 286, 600, 882
Disinfecting combs with formalin....419
Disposing of the honey-crop....131, 158, 170, 217
Distance bees fly for nectar....652, 763, 882
Dividing colonies....505, 699
Divisible brood-chamber hives....188
Do bees freeze or starve?....163, 298, 312
Do bees move eggs?....666
Dodder or love-vine....470
Does alfalfa produce honey in Texas, with or without irrigation?....881
Doolittle's queen-rearing methods....35
Doubling up colonies....507, 521
Drawn sections changing color....748
Drink—a summer....618
Drip-sticks for no-drip cases....262
Drone-brood and worker-brood....281
Drone-brood exempt from foul brood....83
Drone-brood for fish-bait....598
Drone-brood in sections....542
Drone-comb required in a hive....143
Drone-juice as an apifuge....731, 795
Drones....247, 469, 505
Drones—killing....827
Drone-trap—use of the....522
Dry and liquid substances at hive-entrances....211
Dry weather and color of honey....536
Dummy—using the....345
Duties on honey....181

Education for the public—honey....539, 741
Entrance in winter....40
Essence honey....553
Evaporating honey in the hive....344
Evaporating nectar—how the bees do it....5
Evolution of bees....425
Exchanging supers....279
Exhibits and prizes at conventions....793
Experimenting in apiculture....136
Experiment with alfalfa in Illinois....117
Extracted honey....118
Extracted honey exhibits....328
Extracted honey in tanks—storing....436
Extracted vs. comb honey....345, 695
Extracting all the wax....862
Extracting combs....426
Extracting from combs containing brood 7, 552....666
Extracting honey....61, 467
Extracting small quantities of wax....553
Eyes of bees....88
Ezera Thrasher and his bee-keepin'....342, 425

Fair exhibits of honey cookery....6
False conclusion from true premises....821
Farmer bee-keepers....490, 903

Fastening foundation....110, 184, 188, 296, 379, 392, 506, 523, 568, 828, 842..... 843
Fastening sections in frames..... 61
Fastening starters in sections..... 236
Fastening transferred comb in frames..... 314
Feed for bees for winter..... 683
Feeding back 344
Feeding bees....8, 40, 56, 77, 85, 143, 145, 185, 213, 293, 247, 249, 265, 297, 360, 393, 440, 441, 455, 553, 582, 587, 651, 677, 693, 725, 731, 748, 765, 778, 779, 827, 840, 845..... 886
Feeding bees in an observatory hive.....40, 103, 126..... 280
...g sugar and feeding back honey..... 441
...r winter packing..... 51
separators and tall sections..... 152
...rtation of queens..... 747, 845
Finding queens.....455, 471, 572, 730, 861
Flights for cellared bees..... 3
Flour as a substitute for pollen..... 99
Food frauds and food officials..... 865
Food offered to queen or demanded..... 629
Foul brood....7, 65, 133, 147, 150, 171, 265, 349, 361, 392, 440, 554, 683, 699, 728, 745
Foul brood affects the larvae—why..... 794
Foul brood and black brood..... 7
Foul brood and extracted honey..... 435
Foul brood and its treatment.....186, 419, 469, 587..... 619
Foul brood inspection..... 839
Foul brood law..... 325
Foul brood law in California..... 134
Foul brood law in Illinois..... 542
Foul brood legislation.....340, 450
Foul brood vs. bee pest..... 99
Foul broody colonies—handling..... 105
Foul broody hives 8
Foundation.....54, 144, 231, 329
Foundation splints 361, 586
Frames 281, 328
Frames full of honey..... 361
Frame-spacer—a top and bottom..... 664
Freckle cure—honey 698
Freezing worse in cellar than outdoors for bees 243
Freight rates on honey.....279, 537
Freight rate on jacketed honey-cans.....324, 408
Frost-proof hive—improved 143
Fruit trees 470
Full sheets vs. starters.....843, 905
Full vs. light-weight sections..... 331
Fumigating comb-honey 794
Fumigating empty combs 695
Fumigating foul-broody hives..... 121

Geranium or crane's-bill..... 867
Getting bees out of a chimney..... 185
Getting bees out of supers.....56, 569
Getting bees to adulterate honey..... 715
Getting people to use more honey..... 19
Getting sections filled..... 231
Getting supers ready in winter..... 217
Getting swarms to enter empty hives..... 281
Getting unfinished sections filled..... 75
Giant bees and the Philippines..... 183
Giant bees of India..... 679
Giving afterswarms combs of brood..... 378
Giving brood to shaken swarms..... 501
Glucose 567, 568
Going to bees—the (poem)..... 705
Golden Italians 13, 77
"Good" candy made with granulated sugar. 144
Government aid to apiculture..... 214
Government and Caucasian queens..... 863
Government distribution of queens..... 788
Graded comb-honey for market..... 533
Grading honey—rules for..... 629
Granulated honey 281, 629
Granulation of honey—prevention of..... 877
Grape puncturing and birds..... 904
Greatest honey State..... 544

Handling bees 452, 522, 867
Hauling bees 794
Highbarger's record of queens..... 183
Hive-buying and hive-making symposium.... 357
Hive-cleats 168
Hive-covers in winter 683
Hive-covers—preventing leaky 393
Hive-cover—taking off the..... 523
Hive-entrance—best 356, 425
...trances 265, 693, 897
" producing extracted honey..... 583
...ng at home explained..... 405
... question and a beginner..... 715
Hives 40, 291, 357, 359, 393, 635
Hives and combs—proper care of..... 101
Hives—home-made vs. factory-made 357, 668
Hives numbered and in groups..... 650
Hives, sections, supers, etc..... 89
Hive temperatures 882
Hive-tool 360, 780
Hiving bees on full sets of drone-combs.... 360
Hiving bees with a shotgun..... 38
Hiving swarms...55, 147, 350, 437, 441, 683, 883
Hiving wild bees in trees..... 523
Hoffman frames.....350, 361, 568
Hoffman vs. closed-end frames.....108, 153, 234
Holy Land bees..... 63
Home demand for honey—increasing the.... 182
Home-made bee-supplies..... 335
Home-made hives.....173, 357, 358, 445, 647
Home marketing of honey..... 341
Home market's demand and supply..... 124
Honey advertising in the bee-papers..... 646
Honey and almond paste..... 715
Honey and pollen in brood-combs..... 181
Honey and pure food..... 485
Honey as a bee-sting cure..... 312
Honey as a health food..... 327
Honey as a soap substitute.....360, 493
Honey-barrels—save the empty..... 587
Honey-butter 666
Honey-cake 618
Honey-candy for winter food..... 104
Honey-cases 43
Honey-comb—how bees build..... 730
Honey crop in Michigan..... 541
Honey crop of 1905..... 581
Honey definitions and standards.....198, 419
Honey-dew 710, 900
Honey-display at the St. Louis convention... 5
Honey-drinks 143
Honey-drops 903
Honey-extractor—invention of the..... 451
Honey-flora in California—early..... 325
Honey-flora—study your local..... 471
Honey for chapped lips..... 730
Honey for the toilet..... 507
Honey from hives where bees died—using 296, 313..... 345
Honey-gargle—a..... 863
Honey-house—dimensions for..... 233
Honey in Aikin paper bags..... 152
Honey in ancient Ireland..... 566
Honey—keeping qualities of..... 419
Honey-label—National Association..... 491
Honey marketing and publicity..... 860
Honey market—making a..... 245
Honey-markets 880
Honey-muffins 405
Honey ointment for sores..... 261
Honey on the coast..... 445
Honey or sugar syrup for bees..... 215
Honey-paste for chapped hands..... 405
Honey-paste for the teeth..... 328
Honey-plants.....470, 882
Honey-producers' associations—organizing... 168
Honey publicity 741, 743
Honey results not all in management..... 538
Honey-sections vs. strawberry boxes..... 542
Honey sent to commission-men..... 281
Honey-tank cars for bee-keepers..... 650
Honey—the right name for..... 323
Honey to displace other sweets..... 382
Honey-trees—California 407
Honey-vinegar 847
Honey?—what is.....89, 104, 198, 419, 437, 521
How a bee-keeping sister won..... 263
How bees build cells with exactness....471, 671
How bees measure angles..... 587
How many colonies in one place?..279, 291, 505
How much a bee gathers..... 663
Humming of the bees—the (poem)..... 132
Hybrid bees and fair premiums..... 200
Hybrids vs. Italians..... 233

Illinois Bee-Keepers' bill—the.....116, 180
Imbedding wires in comb foundation by heat 886
Importation of bees by our government..... 631
Improving the stock of bees.....61, 773
Impure food—fined for selling..... 790
Inbreeding 296, 862
Increase...143, 229, 265, 291, 310, 393, 408, 421, 473, 487, 505, 519, 520, 522, 582, 780..... 846
Indian turnip 392
Inspection of apiaries in Illinois—State..... 407
Inspector of apiaries' report..... 151
Inspectors of apiaries..... 827
Insuring bees 423, 725
Interstate pure-food law..... 897
Introducing queens...209, 211, 441, 542, 548, 619, 620, 667, 747..... 779
Introducing queen-cells or queens..... 441
Italian bees 392, 604, 715
Italianizing bees.....144, 249, 265, 362, 506, 780
Italian or Carniolan bees perhaps the best.. 265
Italians vs. blacks against foul brood..... 75
Italians vs. other bees..... 231

January—work in the apiary for..... 900

Kansas State Fair..... 614
Keeping bees 7, 142, 505
Keeping bees on a roof..... 268
Keeping bees on shares..... 249
Keeping colonies warm..... 234
Keeping comb honey in good condition..... 539
Keeping combs until next summer..... 861
Keeping down swarming..... 700
Keeping qualities of honey..... 553
Keeping queens 361, 421
Keeping the wax-worm out of sections..... 651
Kerosene for driving bees..... 3
Kettle for rendering beeswax from old combs 583..... 682
Kind of hive for al kinds of honey—the..... 864
Knotwood 700
Krainer bees 121

Lady president of the British Association—a 327
Lake Geneva midsummer fair..... 614
Langstroth hive advantageously—using the.. 326
Langstroth hive size..... 8
Langstroth hive—10-frame..... 392
Largest average yield..... 210
Larval food—influence of..... 857
Late swarms 715, 779
Latham hive 169
Lava soap for removing propolis..... 533
Laws on bee-keeping..... 547
Lawsuits and the National Association..... 51
Laying workers.....507, 602, 620
Leasing ground for an apiary..... 143
Leaves for winter packing..... 845
Lebkuchen 23
Legislation affecting apiculture..... 340
Lemon-juice in sugar syrup..... 361
Liberating the queen..... 699
Life of different races of bees—length of... 882
Light-weight sections.....328, 378, 395, 652
Light-weight vs. full-weight sections..... 503
Lining bees in the woods.....586, 651
Liquid oozing from hives..... 233
Location—finding a..... 715
Location for keeping bees.....506, 731, 747
Location in Virginia or Maryland..... 142
Locations—non-interference in..... 742
London—honey in the heart of..... 586
Longevity of workers and drones..... 344
Long-tongued bees 77
Loss of bees.....279, 284, 328, 725
Loss of young queen in mating..... 39

Mailing honey samples..... 85
Mailing infectious material..... 761
Mailing laying queens..... 666
Make or buy hives—which?..... 290
Making hives.....55, 56, 184, 211
Making of honey..... 821
Mallow 700
Management with box-hives..... 237
Management—questions on 793
Managing bees.....117, 149, 296, 408, 520, 651, 667..... 845
Manipulation of colonies—seasonable..... 453
Manufactured comb honey...55, 275, 291, 340, 376
Maple-leaved goosefoot 748
Maple syrup for feeding..... 233
Marigold 700
Marketing honey.....28, 444, 457, 462, 471, 533, 569..... 865
Massachusetts people as honey-eaters..... 897
Mating and swarming of virgins.....581, 645
Mating of queens.....39, 121, 184
Melting combs containing honey..... 361
Membership in bee-keepers' organizations... 105
Mending a leaky wooden tank..... 521
Mice and snakes in the hives..... 361
Mice in hives in winter..... 837
Michigan State convention..... 84
Milkweed pollen 523
Miller feeder..... 731
Miller frame 169, 586
Missouri Apiary Bill vetoed by Gov. Folk 261..... 310
Missouri's Foul Brood Bill..... 307
Mistakes of bee-keepers..... 840
More bees—more honey..... 372
More honey from basswood leaves or blossoms?.....598, 650, 682
More honey from colony and one swarm or from colony and no swarm?..... 535
Mortality among bees..... 406
Mosquito-hawks catching bees..... 543
Motherwort.....521, 523, 544, 668
Moths in hives.....345, 377, 490
Movable-frame hive—invention of the...340, 404
Moving bees...43, 44, 89, 279, 280, 281, 297, 345, 361..... 757
Musical face—a..... 746

National advertising committee 762
National and other conventions..... 725
National Association....51, 83, 136, 181, 614, 661, 662, 672, 694, 762, 773, 858..... 879
National Association and incorporation—the. 115, 197, 200, 243..... 328
National Association honey-label..... 491
National bee-convention—first".....387, 388
National convention....5, 9, 25, 41, 57, 660, 677, 694, 725, 789, 790..... 844
National honey exchange—a..... 601
National legislation to suppress bees..... 899
National pure food bill..... 52
Natural conditions in the fall..... 883
Nature study—encouraging 136
Nectar and honey—a consideration of..... 899
New Mexico foul-brood law..... 314
New South Wales Association rules..... 420
Newspaper facts (?) about bees..... 131
Newspaper glucose yarns—some..... 339
New York bee-disease, or black brood..... 148
New York City Park bee-keeper contest.... 327
No-bee-way sections 262
Noises disturb bees?—do..... 651
Nominations for officers of the National.... 83, 821..... 845
Non-swarming bees 220, 473, 506
Northern Michigan a bee-keeper's paradise.. 201
Not more colonies, but more from each.... 567
Nuclei—making 300
Nuclei swarming 845
Nucleus management 699
Number of bees to store a pound of honey.. 762
Nurse-bees 746

October—work in the apiary for..... 679
Odor of bees..... 453
Odor of queens..... 554
Official "standard honey"..... 168
Oil-cans for honey.....796, 903
Oil-cloth or super-cover in winter..... 905
Old brood-comb and size of bees..... 121
Old vs. new foundation.....54, 231, 493, 520
One-piece sections..... 565
Orange-trees and apple-trees..... 863
Out-apiaries 39
Out-apiary grounds—enclosing..... 827
Outdoor suitable work for women..... 553
Overground cellar..... 105
Overhauling the hives..... 76

Packages for honey..... 847
Packing bees for winter..... 345
Painted hives 265
Painting hives. 169, 778
Paradise—a bee-keepers'.....198, 201
Partridge-pea—the 653
Paste for labeling tin..... 693
Paste for rough skin..... 38
Pear-blight and the bees..... 163
Pennsylvania Bee-Keepers' Association..... 29
Pests of the apiary..... 841
Pickled brood.....93, 148, 598, 699, 714
Placing sections in the super..... 424
Plain sections 77, 698
Plain sections vs. slotted or bee-way..... 23
Plants—identification of..... 613
Poisoned bees..... 600
Poisonous honey.....586, 613, 710
Pollen 408, 455, 523
Pollen—getting combs cleaned of..... 429
Pollen in the brood-nest..... 264
Popularizing the value of bees and honey.... 35
Preparing for winter..... 651
Preservative not allowed in honey..... 164
Preventing afterswarms.....23, 169, 345
Preventing increase.....23, 89, 361, 827
Prevention and control of swarming with the Heddon hive..... 151
Prevention of robbing.....502, 552
Prevention of swarming.....105, 121, 142, 210, 264, 265, 297, 313, 361, 393, 425, 501, 516..... 773
Prices of bees.....245, 328, 359

Prices of bee-supplies....248, 294, 473, 647, 747, 823..... 844
Prices of hives..... 99, 217
Prices of honey..... 51, 648
Prices of sections..... 588
Prickly pears as bee-feed..... 24
Producing beeswax..... 586
Producing comb-honey.....20, 146, 213, 846
Producing extracted honey..... 279
Producing section honey with and without separators 20, 309
Propolis.....168, 279, 345, 568
Propolis scraping and wide frames..... 281
Proportion of comb sealed before extracting..... .....456, 587
Protecting hives from sun heat..... 794
Prunes and honey—the funny man's..... 827
Public honey market—a..... 328
Punic bees..... 145
Punic or Tunisian bees..... 83
Purity vs. good working qualities in bees... 824
Putting bees in the cellar.....24, 861
Putting bees on drone-combs..... 39
Putting bees out of the cellar.....169, 210, 233, 375..... 380
Putting on supers....147, 279, 297, 393, 408, 457, 505, 521, 542..... 651
Putting weak colonies over strong ones..307, 345, 360, 453, 505, 570, 604, 647, 714, 746

Quality in honey, then quantity..... 696
Queen and drone-traps—improvement in..... 278
Queen-cage cardboards.....725, 779
Queen-cells—bees tearing down..... 603
Queen-cells—building..... 618
Queen-cells—cutting out.....142, 542, 598
Queen-cells—judging from..... 651
Queen-cells—using 506
Queen entering the wrong hive..... 619
Queen-excluders 419, 747
Queen-excluding honey-boards..... 652
Queen experiences..... 566
Queen laying several eggs in a cell..... 506
Queenlessness....40, 143, 249, 393, 441, 490, 553, 571, 587..... 683
Queen-nursery. 421
Queen-rearing.....24, 35, 40, 144, 312, 313, 392, 435, 548, 587, 619, 652, 731, 862, 864..... 882
Queens....361, 409, 440, 604, 613, 618, 620, 666, 667, 699, 711, 748..... 789
Queens and baby nuclei.....441, 522, 545
Queens and their influence upon success in bee-culture..... 150
Queens fighting..... 44
Queens hatching..... 301
Queens in the mails.....565, 647, 746, 791
Queens killed when introducing..... 568
Queens laying several eggs in a queen-cell.. 634
Queens missing and no queen-cells..... 377
Queens piping..... 212
Queens reared in the South..... 211
Queens—select tested..... 316
Queen's wing and leg growing..... 551
Queen terms—meaning of..... 586

Rabbets—depth of..... 142
Race of bees for Texas..... 882
Races in one yard—various..... 281
Races of bees.....142, 183, 214, 341, 588, 682
Rearing early drones and queens..... 277
Red clover bees.....56, 523, 699
Red clover bees and queens..... 136
Red raspberry and its honey..... 203
Reducing rearing of young bees in a honey-flow 142
Redwood—California 408
Re-introducing a balled queen..... 548
Reitsche-Getaz press..... 780
Removing supers for winter..... 731
Rendering beeswax.....216, 377, 776
Renting land for an apiary..... 262
Requeening colonies....8, 523, 540, 760, 845, 861
Requeening vs. shaking swarms..... 645
Reserve combs for feeding bees..... 693
Results of the apiarian experiments at the Central Experiment Farm..... 207
Retailing honey.....245, 567
Rietsche-Getaz press 780
Rietsche press.....105, 329
Ripening honey..... 666
Roaches in hives..... 345
Robbed colony.....345, 731
Robber-bees—preventing 297
Robber-bees—treatment of 444, 451, 741
Robber-cloth 72, 569
Rock Candy for feeding..... 582
Rocky Mountain bee-plant and a mint..... 554
Roger's 'song (poem)..... 507
Rules for bee-associations.....420, 553
Running out-apiaries and managing swarming 905

Sage. 700
Sage honey..... 542
Sainfoin and sweet clover seed..... 24
Sainfoin as a honey-plant..... 581
Sainfoin clover.....56, 104, 209, 344
Sainfoin honey..... 23
Salt and water for bees..... 345
Sawing off swarms on trees..... 7
Scriptural cake..... 6
Sealed honey—reserve combs of..... 612
Sealing honey with heat of hive..... 376
Second-hand square oil-cans for honey..... 796
Second swarm..... 522
Section-foundation. 146
Section-foundation starters dropping off..... 264
Section honey—labeling 827
Section honey never poisonous..... 714
Section-press for folding sections..... 262
Sections.....28, 122, 231, 279, 392, 586, 587, 683, 695, 794..... 858
Sections and separators..... 843
Sections on the hive—don't leave..... 698
Sections protected all around..... 328
Section-timber—scarcity of..... 450
Self-requeening 523
Selling and shipping honey..... 537
Selling foul-broody honey..... 264
Selling honey....51, 119, 189, 231, 267, 338, 597..... 899
Selling honey through grocers..... 471
Sense of smell among bees.....567, 570, 632, 682
Separators 147, 393
Separators nailed to wide frames..... 134
Separators or no separators?..... 136
September—work in the apiary for..... 616
Serradella 211
Shade for bees..... 571
Shaken swarms....19, 40, 144, 198, 349, 392, 411, 550, 634..... 668
Shaken swarms in Australia..... 131
Shaking bees..... 547
Sheep in the apiary.....183, 847
Shipping bees.....184, 746, 747
Shipping carloads of comb honey..... 878
Shipping-cases—depth of.....602, 762
Shipping honey.....227, 267
Shipping queens..... 13
Shook swarming and red clover queens..... 22
Shook swarms and out-apiaries..... 89
Shooting down high swarms..... 487
Shooting swarms off of trees.....89, 650
Should the National be incorporated?..... 260
Shrinkage in scale-weights..... 730
Side springs for brood-chambers..... 371
Single vs. double brood-chamber colony..... 296
Sisters and the National convention..... 844
Size of hive.....105, 119, 142, 146, 166, 184, 454
Skunks in the apiary..... 841
Sleeplessness—honey for..... 376
Smartweed. 700
Smelter gas..... 377
Smoker fuel.....115, 597, 709
Smoker open at both ends..... 571
Smokers.....295, 597, 619, 678, 714, 715
Smoking bees.....104, 190, 523
Snakes in the hive..... 361
Sneak-thief boys outwitted with bee-hives... 666
Snow around hive-entrances..... 263
Solidifying of liquid sugar and honey..... 280
Sowing clovers in sandy soil..... 8
Space between bottom-board and brood-frames 409..... 603
Spacing in hives..... 586
Sparrows—dead wrong about the..... 906
Species of bees.....214, 344
Spice-cake 23
Split sections..... 586
Split-top sections..... 662
Spraying fruit-trees while in bloom—the bees against..... 293
Spraying—laws against..... 265
Spreading brood not advisable..... 165
Spring management of bees..... 519
Spring troubles with cellared bees..... 275
Squab-raising with bee-keeping..... 730
Stand or colony?..... 709
Starters.....247, 345, 392, 455, 511
Starting in bee-keeping.....38, 119
Starting nuclei late..... 506
Starved brood 148, 600
Stimulative feeding of bees....121, 184, 297, 344
Stingless bees.....631, 679
Straight combs..... 571
Strained honey..... 24
Strange bees..... 392
Strengthening a weak colony..... 393
Strong colonies.....377, 663
Stung to death by a bee..... 571
Sucrose in honey.....710, 763
Sugar-candy—making 211
Sugar-feeding among bee-keepers denounced. 163
Sugar syrup not all inverted..... 307
Sulphur for mice in cellars..... 393
Sulphur vs. bisulphide of carbon for fumigating empty combs..... 695
Sumac honey and bloom..... 506
Sumac—scarlet. 554
Sumac drink.....618, 630, 762
Sunflowers—honey in..... 281
Sunken brood-cappings..... 377
Supering 827
Supers and covers—manipulating..... 40
Superseding queens....56, 473, 542, 603, 666, 700
Supers to the hive?—how many..... 586
Super work—best bees for..... 543
Supplies—making one's own..... 395
Surplus comb for hiving bees..... 313
Swarm clustered for 29 hours..... 620
Swarm-hiving experience—a..... 295
Swarm in a chimney—a..... 571
Swarming.....7, 56, 61, 264, 315, 361, 375, 377, 409, 457, 491, 571, 587, 699, 709, 746, 882, 883..... 904
Swarming management.....358, 635, 845
Swarming methods and surplus honey..... 747
Swarming out..... 570
Swarms deserting.....501, 504, 698
Swarms uniting.....441, 544
Sweet clover..... 350
Sweet clover honey..... 825
Sweet mixture for winter stores..... 544
Symposium—hive-burying and hive-making.. 357
Syrian bees and queen record..... 200
Tack-puller as a hive-tool..... 451
Taking off honey.....571, 603

Taking off supers for winter..... 731
Tanging swarms.....709, 790, 883
Tariff on Cuban honey.....324, 408
Tar-paper 345
Temperature for cellar-wintering.....263, 282
Tent-escape—Miller 570
The Honey-Producers' League..259, 275, 291, 296, 322, 324, 339, 355, 371, 389, 485, 538, 743..... 845
Thermometer in the bee-cellar..... 488
Three-frame nucleus and queen..... 905
Time required for swarm-clustering..... 570
Townsend's mixed-sugar plan..... 466
Trade-mark—registering a honey..... 827
Transferred bees rearing no brood..... 543
Transferring bees....56, 105, 245, 297, 312, 329, 361, 377, 393, 425, 473, 490, 505, 756, 763..... 778
Transferring queen-cells..... 56
Transmission of bee-traits..... 121
Trip of a French bee in a bouquet..... 375
T supers..... 393
T tins..... 40
Two queens in one hive.....711, 728, 883

Unfinished sections.....24, 75, 680, 682, 698, 903
Uniting colonies.....262, 457, 490, 491, 523, 543, 587, 603, 646, 682, 700..... 709
Unripe honey 341, 355
Using combs in which bees died..... 426
Using hives in which bees died..... 249

Van Deusen wired foundation..... 168
Ventilating bee-cellars.....106, 517
Ventilation of hives.....435, 441, 475, 840
Vigor of bees—constitutional..... 425
Virgin queens and swarming out.....733, 746

Wasp's nest in a bee-hive..... 315
Water for bees..... 517
Waterleaf—a honey-plant..... 597
Wax and reliquefied honey..... 280
Wax-extractor—a new..... 898
Wax-extractor—home-made 443
Wax in honey—eating..... 666
Wax-moths.....651, 679
Wax-press—pressure of the German..... 777
Wax—running an apiary for..... 619
Wax-scrapings into marketable shape—converting 903
Wax-secretion—experiments in..... 634
Wax-secretion of bees..... 731
Wax-worms for fish-bait..... 773
Weak colonies.....438, 651
Weak colony—treatment of a..... 635
Weak nucleus building worker-comb..... 392
Web-worms in section-honey..... 700
Weight of colony for wintering..... 683
Weight of sections..... 90
Weight of hives..... 233
Well-ripened honey..... 845
West Michigan fair.....429, 646
What ails the bees?..... 651
What is honey?.....35, 104, 164, 166, 167, 184
What to combine with bees..... 440
White and yellow sweet clover..... 517
White clover.....13, 105
White clover winter-kill?—does..... 51
White flakes in front of the hive..... 571
Why do bees ignore some flowers at times?.. 568
Why some bee-keepers succeed and some do not..... 828
Wide frames—propolis scraping and..... 281
Width of sections in England..... 838
Wife in Heaven—to my (poem)..... 873
Wine barrels for extracted honey..... 542
Winter conditions..... 905
Winter hive-protection..... 651
Wintering a queen with few bees..... 450
Wintering bees..24, 27, 28, 40, 73, 74, 76, 91, 104, 109, 118, 142, 143, 209, 213, 232, 265, 296, 301, 333, 343, 345, 360, 390, 391, 392, 409, 551, 586, 634, 635, 651, 683, 731, 744, 765, 779, 791, 827, 845, 880
Wintering nuclei in observatory hives..... 261
Winter losses—cause of..... 55
Winter packing.....51, 725, 845
Winter stores.....542, 544, 827, 829
Wire for cutting granulated honey..... 231
Wiring foundation..... 552
Wiring frames..... 842
Wisconsin foul-brood experience..... 167
Woman bee-keepers' political prospects..... 826
Woman does—what one..... 778
Woman's bees and poultry—a..... 522
Wood splints vs. wired frames..... 699
Worker and drone eggs..... 171
Worker-eggs in drone-cells..... 51
Working up a honey market..... 280
Wormwood—a variety of..... 828
Wrapping hives with building-paper..... 203

Yellow and white sweet clover.....634, 635
Yellow bees..... 542
Yellow-jacket and wasp-stings vs. bee-stings 55
Yield from one colony—great..... 285
Young queens and afterswarms..... 99

ILLUSTRATIONS

Apiarian display of Louis Werner..... 33
Apiarian display (Root's) at St. Louis..... 737
Apiarian exhibit at West Michigan State Fair... 577

APIARY OF—

Ball, W. D..... 673
Bartlett, Ira D..... 204
Baxter, E. J..... 513
Blunk, J. P..... 657
Buchanan, J. M..... 803
Butcher, E. E..... 161
Butler, J. M..... 689
Chapman, S. D..... 2 2
Clarke, Chas..... 833
Craven, E. E..... 769
Creighton, J. G..... 737
Dexter, F. Z..... 242
Elmore, L. W..... 433
Ferry, H. S..... 801
Ford, S. C..... 609
Gibson, H..... 242
Harrington, M. W..... 273
Haynes, J. M..... 33
Honaker, Mrs. and Mr. Jas..... 593
Hoss, Walter..... 225
Jones, Paul..... 177
Kilgore, S. G..... 673
Kirkpatrick Geo. H..... 203
Kretchmer, E..... 465
Luhdorff, Otto..... 754
Macklin, Chas. G..... 433
Martin, Jas..... 203
McIntyre, J. F..... 785
McNeill, Jas..... 433
Measer, J. J..... 609
Miller, Dr. C. C..... 534
Miller, F. J..... 449
Mosteller, J. M..... 433
Murphy, W. W..... 402

Otto, John F. 133
Richardson, C. C. 561
Robinson, T. P. 561
Scoggin, Edw. 306
Smith & Son, F. C. 161
Soper, W. D. 513
Southwest Texas 81
Stanley Bros. 486
Stratton, Albert J. 561
Watson, Mrs. M. 247
Whitney, Wm. M. 609
Wutzke, R. F. 893
York, Editor 801

Baldridge, M. M. 385
Bee-dress for women. 801
Bee-smoker (Conrad's) 673
Bigelow educational hive. 370
Bohrer, Dr. G. 385
Boyden, Arthur L. 322
Brodbeck, Geo. W. 200
Brood-combs with 119 queen-cells. 529
Buckwheat in bloom. 402
Bush Temple of Music. 789

Calvert, John T. 322
Carlonding of honey 878
Clarke, W. F. 385
Cloistering hive. 406
Clovernook apiary (Miss Wheeler's) 885
Colorado apiarian exhibit at the St. Louis Exposition 113
Cook, Prof. A. J. 134
Comb honey packed for shipping 537
Cowan, Thos. Wm. 338

Dadant, Chas. 502
Dadant (C. P.) and home. 497, 853
Dadant, Henry C. 497
Dadant, Louis C. 497
Dadant factory 502
Doolittle, G. M. 134
Drone and queen trap—Dibbern's 278

Falconer (W. T.) and factory 353
Fastening foundation. 842
Folding Sections 842
France, N. E. 853
France (N. E.) and foul broody comb. 721

Gallup, Dr. E. 385
Greiner, F. 134

Hammer, Mr. and Mrs Julius .....
Hatch, C. A. 850
Hetherington, Capt. J. E. 130, 141
Hetherington's (Capt.) bee-yard in the fall. 140
Hetherington's (Capt.) original straw hives. 138
Hetherington's (Capt.) old and new bee-cellars. . 139
Hetherington's (Capt.) sword 140
Hetherington's (Capt.) first load of bees. 137
Hetherington's (Capt.) home and last load of bees 137
Hive on scales. 625
Holding a swarm—Dr. Emmons. 161
Holekamp, R. A 417
Honey crop of Chas. Clarke. 838
Hutchinson, W. Z. 853

Kettle for rendering beeswax 583
Kilgore (S. G.) and comb honey 673
Kilgore's (S. G.) tiered-up hive. 673
Kretchmer (E.) home and factory. 465
Kretchmer, Chas. W. 468
Kretchmer, Justus C. 468

Lake Phalen apiary of H. G. Acklin. 49
Langstroth, L. L. 873
Ludhorff's (Otto) hives on scales. 754

Merrill, D. E. 353
Michigan State convention group. 258
Midsummer fair apiarian exhibit. 609
Milkweed 201, 202
[illegible]r, Dr C. C. 529
[illegible]r's (Dr.) colt "Roderick" 529
[illegible]chell, N. C. 385
[illegible]ndeng (Chas.) and factory 226
[illegible]moon, A. F. 385
Morgan, R. A. 161

Nysewander (Jas.) and store. 481

Orange-tree in California 785
Out-apiary of H. G. Acklin. 17

Part of one colony's honey crop. 625
Pettit, Morley 834
Pouder, Walter S. 98
Pratt's or Swarthmore's queen-rearing methods 546
Prisk's (Wm. E.) Wisconsin State Fair exhibit. . 801

Red raspberry (wild) 204
Roof-apiary of C. H. W. Weber. 1
Root (A. I.) and factory. 322
Root, Ernest R. 322, 859

Self-spacing of frames. 844
Selser, Wm. A. 801
Smith, Geo. A. 468
Stand (Conrad's) for holding supers. 273
Store of Walter S. Pouder. 98
Store of C. M. Scott. 98
South Dakota Fair apiarian exhibit. 161
Tent bee-escape (Miller) 570
Top and bottom frame spacers. 673
Top and bottom starters in a section 456

Uncapping fork 469
Utah apiarian exhibit at St. Louis. 194

Wax-extractor—A. C. Miller's 893
Weber, C. H. W. 1
Weber, Chas. H. 1
Weber, Emma 1
Whitney, Wm. M. 615
Wilcox, Franklin 849
Wilson, "Mother" 529
Wilson (Miss) ready for bee-work. 535
Winter view of F. Greiner's apiary. 136
Wiring frames. 842
Wutzke R. F.—home of. 893

CORRESPONDENTS

Abel, Florence M. 360
Adams, Frank P. 582
Aikin, R. C. 805
Allen, John, 357
Alley, Henry, 380, 429
Ames, Mrs. J. B. 863
Amos, Mrs. A. L. 634, 763, 826
Anderson, Anton G. 700
Andrews, D. E. 397
Antes, Mrs. L. 167
Archer, Dr. J. 75
Ashley, G. D. 348
Atwater, E. F. 152, 668, 791
Ausmus, J. B. 620

Baerman, Rev. G. J. 316
Bailey, W. M. 652
Bain, A. T. 349
Bainard, E. L. 846
Baldridge, M. M. 469
Ball, W. D. 678
Ballinger, W. A. 315
Barber, C. J. 94
Barber, E. S. 796
Barber, Ira, 266
Barnard, H. C. 795
Barrette, Mrs. Paul, 521
Bartholomew, H. E. 445
Bartz, A. C. F. 331
Baumgaertner, J. G. 733
Bechly, Fred 14
"Bee-Keeper in Virginia," 358, 366
Beiler, A. S. 75
Bell, L. B. 796
Benton, Frank, 59, 308
Bergstrand, C. O. 554
Beverlin, W. S. 554
Best, Henry, 44
Bevins, Edwin, 430, 452, 475, 518, 572, 652, 680, 717, 760, 867
Bigelow, Prof. Edw. F. 373, 790, 812
Black, S. N. 444
Blair, L. G. 302, 604
Blanton, Dr. O. M. 684, 733

Blevins, Harry, 868
Bloomenstine, Hans, 429
Blough, Christian, 46
Blunk, J. P. 663
Boelte, Max, 554
Bohrer, Dr. G. 185, 310, 359, 388, 457, 538, 588, 700, 711, 823
Bonhote, E. 246
Boutwell, Roy A, 812
Boyd & Son, J. K. 668
Bricker, Henry, 29
Bridgman, C. R. 554
Bryant, E. J. 620
Buchanan, Chas. J. 142
Buchanan, J. M. 898
Burch, W. P. 636
Burdette, Ethel M. 232
Burdick, Dr. A. E. 717
Burkholder, A. 457
Burnett, R. A. 355
Burns, A. J. 684
Burt, Vernon, 725
Bushby, H. A. 236
Buswell, Turner, 413
Butler, Mrs. Etta, 569
Butler, J. M. 694
Byer, J. L. 744, 884

Candler, Mathilde, 280
Carpenter, A. B. 380
Cary, W. T. 524, 647
Chevalier, C. G. 898
Chinn, R. 47
Christensen, Nels, 173, 302, 382
Christie, J. R. 588
Clark, Wm. 314
Cleary, Wm. 29
Cline, John, 28, 459
Cochems, John, 780
Congdon, H. W. 266
Conrads, Waldo C. 277, 678
Cook, Prof. A. J. 36, 37, 133, 142, 214, 284, 292, 325, 398, 406, 470, 541, 631, 710, 774, 807, 880
Cook, E. L. 186
Cooke, A. N. 78
Cotton, C. B. 359
Cottrell, F. M. 507
Coveyou, Elias E. 524
Craig, W. J. 150
Creighton J. G. 742
Crim, S. T. 652, 805
Crowther, H. E. 444
Cutter, Elsie, A, 746

Dadant, C. P. 22, 85, 166, 181, 216, 245, 327, 405, 520, 540, 567, 583, 616, 632, 647, 679, 759, 791, 823, 880, 900
Darnell, W. O. 554
Daughtrey, Joel, 812
Daum, F. P. 357, 378
Davenport, B. T. 555, 635
Davenport, C. 358, 375
Davis, John, M. 652
Davis, 1st W. J. 30, 476
Day, F. L. 764
Dayton, Mrs. C. W. 183
Dayton, C. W. 92, 102, 238, 422, 540, 664, 840
Dennler, Mrs. Lucie, 376
Denio, Herbert W. 395
Der Imker, 186
Dibbern, C. H. 278
Dickinson, Emily, 762, 810
Dickson, John L. 46
Diebold, A. J. 733
Diefendorf, E. W. 604
Doolittle, G. M. 5, 54, 134, 181, 215, 229, 277, 310, 390, 421, 453, 470, 504, 539, 615, 663, 759, 807, 824, 859, 881
Duescher, Wm. 91
Dunlop, Dave S. 437
Dysart, Samuel, 879

Eagerty, Wm. H. K. 668
Eaton, Dr. E. N. 866
Edgeworth, W. C. 867
Edwards, Evan E. 185
Ellifritz, Mrs. Sadie, 264
Ellis, W. H. 334, 684
Elmore, L. W. 436
Elwood, P. H. 137
Em Dee, 907
Emmons, Davis R. 126, 572
Engle, M. C. 906

Farmer, A. 186
Feeback, W. S. 332
Fees, L. 38
Ferguson, Mrs. Ben, 392
Ferry, H. S. 524
Fisher, B. W. 174
Fixter, John, 209
France, N. E. 5, 10, 181, 188, 261, 324
Freeman, A. J. 73, 636
Freeman, Mrs. Legh R. 86
Fritze, W. F. 236
Folk, Joseph W. 261
Foote, A. F. 791

Gannaway, H. P. 868
Garner, H. M. 684
Gerthoffer John, 554
Getaz, Adrian, 598, 645, 727, 808, 841, 899
Gill, M. A. 213
Gleysteen, G. 234, 636
Gonor, W. 341
Goodale, Miss D. 811
Goodnow, V. A. 668
Goss, R. V. 219
Grass, L. L. 597
Green, J. A. 360, 520, 536, 725
Green, Jesse, 299
Green, Stephen N. 743
Greenfield, Aug. 709
Greiner, F. 135, 262, 294, 298, 487, 537, 588, 695, 775
Greiner, G. C. 101
Griffith, Mrs. Sarah J. 232, 296
Gross, Gustave, 867
Gunther, John H. 378
Guthrey, E. G. 554

Hairston, J. T. 795
Halley, Rebecca, 344
Hambaugh, J. M. 254, 308
Hammersmark, J. T. 93, 588
Hammond, L. A. 316
Hanegan, Leo F. 268, 629, 878
Harbaugh, Thos. C. 817
Harlan, C. H. 423
Hall, E. I. 73
Hall, F. W. 76, 460
Hall, Mary B 168
Harmer, Walter, 76
Harrington, M. W. 277
Harris, Chas. M. 217
Harrison, Prof. F. C. 149
Hasty, E. E. 249
Hawk, G. D. 430
Haxton, W. S. 764
Hayek Bros. 620
Haynes, David, 301, 524
Haynes, J. M. 36
Hazard, Cora Lapham, 198
Heckler, H. W. 363
Hetherington, Eva B. 141
Heurkens, Herman, 427
Hill, H. E. 879
Hillery, J. T. 780
Hilton, Geo. E. 524
Hinderer, Frank, 700
Hinricks, H. 634
Hobbs, J. M. 538
Hobert, W. H. 378, 572
Hodges, G. 43
Hoffman Fred, 572
Holekamp, Robt. A. 132, 180, 308, 380, 761
Holt J. 298
Holtermann, R. F. 207, 323, 742, 757, 861
Homaker, Mrs. Millie, 405, 440, 473, 602, 634
Hopper, Bert W. 828
Hopsecger, C. W. 47, 430, 636
House, Geo. W. 198
Houser A. A. 30
Howard, L. O 790
Hoyt, J. A. 430
Hunsberger, A. C. 44
Hunter, J. K. 267
Huson, A. D. 358
Hutchinson, W. Z. 150 201, 260, 822, 828
Hynek, Jos. M. 339

"Illinois," 537
Irvine, Sr., W. 507, 636

Jeffrey, Robt. A. 364
Jewett, H. S. 898
Job, C. 333
Johns, J. B. 187
Johnson, J. E. 117, 189, 389, 636, 647
Johnson, J. W. 364, 748
Jones, G. M. 108
Jones, J. T. 780
Jones, Paul, 122
Jones, P. D. 110

Kalfus, J. W. 222
Kauffman, Emanuel B. 668
Keizer, N. H. 524
Kellogg, Frank E. 524
Kelly, George R. 238
Kennedy, B. 363
Kennedy, Miss L. C. 794
Kennicott, E. E. 365
Kernan, Wm. 604
Kienzle, G. H. 219
Kilgore, S. G. 395, 678
Kimball, J. 424
Kirkpatrick, Geo. H. 630
Knauth F. R. 887
Knutson, Annie, 903
Koentz, G. H. 90

Lamkin, Lewis, 473
Lamkin, Ward, 333
Langford, Alleine, 312
Langstroth, Rev. L. L. 873
Larrabee, W. G. 210
Latham, Allen, 21, 27, 37, 54, 126, 157, 438, 775
Lathrop, Harry, 76, 132, 230, 800
Laurence, C. M. 588
Lawrence C. M. 220
Lawrence, W. G. 555
Laws, W. H. 777
Learner, 109
Lee, Joel F. 572
Lemaster, P. T. 254
Leonard, L. D. 455
Lincoln, C. M. 414, 733
Linscott, J. L. 333, 716
Long, Irving, 28, 350, 620, 906
Lovesy, E. S. 199, 286
Lowe, Wm. B. 780
Luebke, Chas. 78
Luhdorff, Otto, 758, 764

Majors, S. C. 636
Maneke, Fred W. 554
Marks, W. F. 35, 180
Marshall, R. A. 27
Matthews, Wm. 572
Mayer, Mrs. D. 440
Mead, C. E. 437
Mears, Mrs. C. D. 152
Measer, J. J. 614
Merriam & Son, G. F. 78
Messing, E. C. 748
Moe, H. H. 13
Metcalfe, F. A. 282
Mettler, A. B. 411
Miller, Arthur C. 216, 295, 341, 453, 631, 776, 898
Miller, Chas. J. 887
Miller, Dr. C. C. 53, 197, 243, 261, 413, 487, 538, 613, 645, 725, 887
Miller, F. J. 152
Miller, Jas L. A. 316, 378
Miller, S. E. 597
Miller, Wm. 667
Milligan, Mrs. J. E. 120
Mills, W. H. 171, 350
Mitchell, Chas. 106
Mitchell, George, 266
Mohr, Pius, 350
Moore, Herman F. 407
Morgan, R. A. 228
Morgan, R. A. 332
Mosteller, J. M. 436
Murphy, Damon, 668
Murphy, Wm. W. 404
Muth, Fred W. 226
Muth-Rasmussen, Wm. 365, 646
McBride, A. J. 238
McBride, F. 588
McCain, Robt. B. 652
McCarthy, D. 77
McColley, B. L. 330
McConkey, A. 588
McCorkle, T. F. 796
McCoy, Edw. 887
McEvoy, Wm. 151
McKnight, Wm. S. 780
McLeod, D. C. 443
McNeal, W. W. 583, 728
McNeill, James, 436
McRay, John J. 380

Norlin, Chas. 507
North, Lyman, 190
Nutt, W. C. 812

Oliver, A. L. 334
Oren, John H. 284

Parker, Mrs. J. C. 455
Parrott P. J. 312, 328
Paslay, J. D. 381
Patten, A. E. 684
Pattison, R. R. 524
Pawletta, D. J. 733
Paxson, Mrs. Nellie G. 715
Peck, B. W. 110
Perry, Helen, 104, 231, 248
Pettit, Morley, 119
Pettit, S. T. 167, 294, 629
Pharr, John W. 348
Phifer, Geo. M. 572
Philbrook, H. S. 664
Phillips, Dr. E. F. 679, 789
Phillips, D. R. 395
Phillips, Flora E. 650
Poindexter, Jas. 343
Pollard, Chas. 796
Poore, H. V. 439
Poppleton, O. O. 70
Porter, Elmer E. 106
Pouder, Walter S. 342
Preston, C. A. 764
Price, W. A. 828
Prisk, W. E. 806
Pritchett, E. B. 74
Pryal, W. A. 254, 507
Pulsifer, Nathan, 554
Putnam, W. H. 356

Quirin, H. G. 524

Rauchfuss, F. 507
Ray, Mrs. Mary A. 280
Ray, W. M. 364
Rearick, S. C. 398
Reddert, Henry, 324
Reid, Walter F. 199
Reynolds Alvah, 236, 588
Rice, O. K. 253, 446, 636
Ricketts, L. V. 229, 396, 503, 695, 749
Robinson, T. P. 812, 887
Root, Ernest R. 547
Root, L. C. 142
Root, W. H. 236, 398
Root, W. N. 749
Ruggles, Wm. Z. 220
Russell, C. R. 190

Salsbury, S. N. 554
"San Franciscan," 694
Scardefield, W. M. 269
Schlemmer, Mrs. Martin, 715
Schmidt, B. F. 110, 588
Schmitt, Mrs. L. 23
Schneider, Lisle, 554
Schnuckel, Bernard, 588
Scholl, Prof. Louis H. 26, 85, 117, 165, 328, 793, 846, 864, 881, 882
Schrier, C. 780
Scoggin, Edw. 308
Secor, Eugene, 198, 254
Seifert, Geo. M. 572
Shedenhelm, J. H. 158
Seibod, Jacob, 446
Semmens, John S. 14
Shepard, A. D. 454
Shepard, Ella C. 103
Sibbald, H. G. 151
Singletary, S. B. 684
"Sister Ruth," 885
Smith, Fred, 164
Smith, Geo. J. 566
Smith, H. A. 695
Smith, Harvey, 411
Smith, J. A. 618
Smith, J. Q. 343
Smith, Jeems, 376
Smith, Robert H. 124
Smith, S. B. 341
Smith, W. B. 620
Snell, F. A. 636
Snowberger, A. H. 668
Sossaman, M. H. 158
Southwestern Bee Co. 414
Spitler, Geo. 111
Stachelhausen, L. 246, 404
Staley, S. W. 334
Stanley, Grant, 293, 567, 696, 728
Stark, C. A. 539
Stewart, Chas. 65
Stewart, F. C. 312
Stewart, John C. 189
Stoflet, Frank, 158, 300
Stolley, Wm. 487
Stone, A. E. 122
Stone, Jas. A. 133
Stone, M. A. 652
Stotts, John, 457
Stoutelier, J. M. 436
Strang, H. F. 346
Strong, J. L. 329, 899
Stroschein, F. 567
Suddith, L. H. 668
Sueltenfuss, Otto, 430
Swain, Henry, 588

Tackaberry, A. B. 588
Tarr, C. M. 652
Taylor, R. L. 858
Thaxton, P. B. 780
Theilmann, Mary, 280, 586
Thomlson, Tom 357
Townsend, E. D. 166
Tubb, V. H. 473
Tucker, E. 318
Tyler, Fred, 45
Tyrrell, E. B. 262, 297

Ulrich, James, 507

Vangundy, G. W. 460
Veith, Alphonse, 75

Waterman, Nixon, 705
Watson, Mrs. M. 247
Weber & Sons, J. F. W. 366
Weems, H. L. 37
Welch, T. R. G. 748
Werner, L. 588
West, Robt. 444
Wheeler, Frances E, 88, 311, 327, 533, 886
Wheeler, K. H. 906
White, W. H. 520
Whitney, Wm. M. 309, 812
Whitton, A. A. 684
Wicherts, Sr., A. 153
Wiggin, Mrs. C. D. 903
Wiggins, F. C. 237
Wilcock, James, 860
Wilder, J. J. 363, 620
Wiley, Sarah E. 826, 885
Williams, W. E. 748
Wilson, D. C. 92, 379
Winch, Warren H. 363
Wingate, Mrs. W. S. 341, 440
Winkler, Chas. 749
Wolfe, James, 733
Wood, Delos, 524
Woodall, E. 52
Woodward, C. E. 828
Wright, G. A. 620
Wright, W. D. 67
Wutzke, R. F. 898
Wykoff, H. G. 331
Wyman, Henry A. 555

Yates, A. W. 554, 828
York, George W. 472, 485

Zahner, M. 364
Zieka, John, 382